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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,467	05/31/2001	Liang Chen	25094A	1738
22889	7590	04/14/2005	EXAMINER	
OWENS CORNING 2790 COLUMBUS ROAD GRANVILLE, OH 43023			WYROZEBSKI LEE, KATARZYNA I	
			ART UNIT	PAPER NUMBER

1714

DATE MAILED: 04/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/871,467

Applicant(s)

CHEN ET AL.

Examiner

Katarzyna Wyrozewski

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4-10,12,13,18,19,21,23,24,26,27 and 29-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-10,12,13,18,19,21,23,24,26,27 and 29-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 1714

In view of applicant's amendment submitted on February 7, 2005 following office action is rendered final as necessitated by amendment, in view of the teachings found in ARKENS as applied against present claims. The examiner would like to point out also, that the documents of CHEN and SVEND are evidence teaching that would support one or more of examiner's allegations. They are not utilized as rejections.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Art Unit: 1714

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1, 4-10, 12, 13, 18, 19, 21, 23, 24, 26, 27, 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over HUMMERICH (US 6,071,994) or RECK (US 6,099,773) in view of ARKENS (US 6,136,916) with evidence provided by (CHEN (US 6,274,366) or (EP 567,480).

The discussion of HUMMERICH or RECK from paragraph 2 or 3 of the office action dated 9/7/2004 are incorporated here by reference.

The difference between the present invention and the disclosure of RECK or HUMMERICH is addition of surfactants in to the polymer or binder pre-mix as well as different types of polyols

With respect to the above argument, the prior art of ARKENS (col. 6, lines 52-57) teaches that it is customary to add conventional additives such as emulsifiers, pigments, wetting agents and the like to the binder composition before binder is applied onto glass fiber.

Art Unit: 1714

The polyols of ARKENS are those having two or more hydroxyl groups and include glycerol, pentaerythritol, sorbitol, ethylene glycol, trimethylol propane and the like (col. 6, lines 1-10).

The addition of customary additives to the binder composition to alter properties such as surface tension.

In the light of the above disclosure, it would have been obvious to one having ordinary skill in the art at the time of the instant invention to utilize the additives in ARKENS in the composition of RECK or HUMMERICH and thereby obtain the claimed invention. Such combination would still produce effective binding system for glass fiber.

In their arguments submitted on February 7, 2005 the applicants argued following:

a) The prior art of RECK or HUMMERICH do not teach the present invention, since their emulsifier is added during polymerization process to stabilize the polymer.

The examiner agrees, however, there are two things worth noting. One is that applicant's amendment refers to a process and claims are composition claims. In composition claims the patentable weight is given to the composition and not to the process by which is made, therefore the anticipation rejection still applies for that particular reason. Second, in the even applicants successfully traverse anticipation rejection another reference have been found to provide for teaching of addition of surfactants to the binder instead of during polymerization.

b) Chen or SVEND do not remedy deficiencies of RECK or HUMMERICH

Art Unit: 1714

The prior art of CHEN or SVEND as stated in the rejection are evidence reference, utilized to either support examiner's allegation or because the prior art of record relies on them one way or the other.

c) The prior art of record does not teach polyol compounds of the present invention.

Newly amended claims are now rejected by the combination of the prior art of record with the disclosure of ARKENS.

### ***Request for Clarification***

In the independent claim 5, the applicants indicated that the surface tension of the binder is less than 66 dynes/cm.

Now, knowing that the surface tension and viscosity of the binder, such as phenolic binder, are related and the applicants description of phenolic binder is "traditional phenolic binder" the examiner requests clarification of numerical limitations of surface tension recited in pending claims. This request is warranted by the fact that there are so many varieties of the "traditional phenolic binders" that the recitation of the surface tension is unclear.

Art Unit: 1714

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

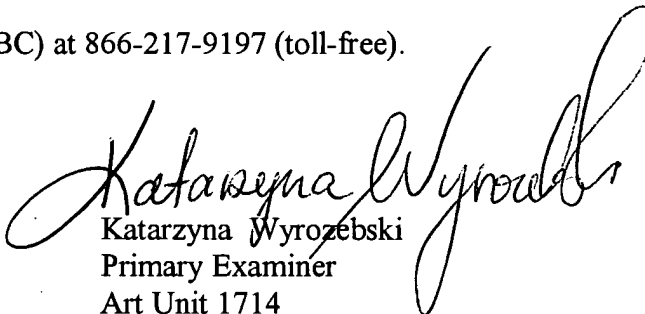
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katarzyna Wyrozebski whose telephone number is (571) 272-1127. The examiner can normally be reached on Mon-Thurs 6:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1714

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Katarzyna Wyrozebski  
Primary Examiner  
Art Unit 1714

April 11, 2005